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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,349	09/01/2004	Motohiro Ohta	09859/0201805-US0	1041

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DARBY & DARBY P.C.
P.O. BOX 770
Church Street Station
New York, NY 10008-0770

EXAMINER	
HAGOPIAN, CASEY SHEA	
ART UNIT	PAPER NUMBER
1615	
MAIL DATE	DELIVERY MODE
07/16/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/506,349	OHTA ET AL.	
	Examiner	Art Unit	
	Casey S. Hagopian	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 May 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17,19-23,26,27,29,30 and 77-79* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17,19-23,26,27,29,30 and 77-79* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Receipt is acknowledged of applicant's Request for Continued Examination/Amendment/Remarks filed 5/2/08.

Claims 1-16, 18, 24, 25, 28, 31-76 have been cancelled. Claims 17, 23, 29 and 30 have been amended. Thus, claims 17, 19-23, 26, 27, 29, 30 and 77-79 are currently pending.

Response to Arguments

Applicant's amendment renders the rejections under 35 USC 112, 1st paragraph moot because the claim language is now consistent with the specification. As such, the rejections under 35 USC 112, 1st paragraph have been withdrawn.

Applicant's amendment renders the rejection under 35 USC 103 over Lech et al. moot. Thus, said rejection under 35 USC 103 has been withdrawn. However, after further consideration a new ground(s) of rejection is made under 35 USC 103 in view of the combination of Lech et al. and Kutilek, III et al. (see below under *New Rejections*).

NEW OBJECTIONS/REJECTIONS

Claim Objections

Claims 23 and 26 are objected to because of the following informalities:

Claim 23 recites the limitation "wherein the material for compression molding contains a lubricant" and claim 26 recites the limitation "wherein the material for

compression molding contains at least one member selected from the group consisting of...". In both claims, it is suggested that applicant include the word "further" between "molding" and "contains" to clarify that the ingredients are additionally included in the "material for compression".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 17, 19-23, 26, 27, 30 and 77-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lech et al. (USPN 5,681,577) in view of Kutilek, III et al. (USPN 5,770,217).

Lech teaches a method of making a cold/sinus preparation (abstract). Said method comprising wet granulation of the active agents and an adsorbent, namely, silicon dioxide (abstract; col. 3, lines 61-63; Examples). Lech teaches the adsorbent to comprise about 50% to about 85% of the adsorbate composition, which translates to a ratio of actives to adsorbate being approximately about 1:10 to 1:1 (abstract). Example III teaches that the actives and adsorbent make up 25% (i.e., 1.25% + 3.0% + 20.75%) of the total weight of the preparation. Example III also teaches that once the drug adsorbate is created, additional excipients including sweeteners, colorants, flavorings are blended with the drug adsorbate, the particular lubricant, magnesium stearate, is then added to the mixture and the subsequently compressed into tablets. The actives taught by Lech are water-soluble as evidenced by the step of dissolving the actives in water prior to the wet granulation step (Examples). Also, a preferred active agent described by Lech is Diphenhydramine HCl (Example III), which has a solubility of 1g/1mL as evidenced by The Merck Index. Lech teaches incorporating particular excipients including disintegrants such as microcrystalline cellulose and other cellulose

derivatives in order to aid in the tabletting and oral administration processes (col. 4, lines 6-8) as well as mannitol as a tabletting agent (claim 18). It is noted that D-mannitol and mannitol are analogous to one another as evidenced by the Handbook of Pharmaceutical Excipients (page 177). It is further noted that mannitol has a specific surface area of 0.60 m^2/g and has a particle size distribution between about 60 and 180 microns as evidenced by the Handbook of Pharmaceutical Excipients (Figure 3; page 179).

Lech does not require a disintegrant. Lech, however, provides motivation for including a disintegrant because Lech teaches that a disintegrant aids in the tabletting and oral administration processes (col. 4, lines 6-8). A practitioner would have reasonably expected an improved tablet comprising a drug adsorbate, D-mannitol and a disintegrant for oral administration. Thus, it would have been obvious for one skilled in the art at the time the invention was made to include a disintegrant as suggested by Lech.

Lech is silent to including a lubricant on the surface of the punch and die, said lubricant selected from the group consisting of magnesium stearate, calcium stearate, stearic acid, stearyl alcohol, sodium stearyl fumarate and sucrose fatty acid ester.

Kutilek teaches that lubricants are traditionally, routinely and effectively used in the tabletting process, both intrinsically (i.e., within the composition) and extrinsically (i.e., outside of the composition) (col. 8, lines 33-49). Kutilek teaches that an extrinsic lubricant can be applied directly to the tabletting tool surface, such as spraying the lubricant onto the die and or punch (col. 8, lines 48-51). Kutilek explains that lubricants

generally reduce friction between the interface of the tablet and the die wall during compression and ejection and also serve to prevent sticking to the punch and the die wall (col. 8, lines 33-40). Kutilek also teaches magnesium, calcium and zinc salts of stearic acid are common lubricants (col. 8, lines 55-56). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply a lubricant to the surface of the punch and die with a reasonable expectation of success because the prior art suggests that extrinsic lubrication is effective in the tabletting process for reducing friction and preventing the tablet from adhering to the punch and die.

Lech is silent to the particular disintegrants, crospovidone, low-substituted hydroxypropyl cellulose, croscarmellose sodium and carboxymethylcellulose.

Kutilek teaches incorporating the disintegrants microcrystalline cellulose and sodium carboxymethylcellulose into a tablet formulation (Table 1; col. 7, lines 21, 26 and 36-44). Kutilek also teaches that disintegrants can comprise form 0% to 20% and more preferably, about 2% to 10% of the composition (col. 7, lines 42-43). Table 1 also exemplifies percentages of the disintegrants, microcrystalline cellulose being 2-15% and sodium carboxymethylcellulose being 0.25-5%. Both references teach tablets and conventional tabletting methods containing conventional tablet ingredients. It would have been obvious to one skilled in the art at the time the invention was made to substitute one disintegrant for another in the percentages disclosed because they are art-recognized equivalents and said substitution would achieve the predictable result of producing a tablet.

Lech is silent to the particular active agent, pravastatin sodium, however Lech teaches compositions comprising bitter-tasting active agents and methods of making thereof (abstract). The problem that Lech sets out to solve is creating a tablet that reduces the bitter taste of the active agent (abstract). Pravastatin sodium is known to be bitter-tasting as evidenced by Morita et al. (JP 2002/020282 A) and Mamiya et al. (JP 2004/339071 A). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include any bitter-tasting active agent such as pravastatin sodium in the formulation of Lech with a reasonable expectation of success because the prior art suggests that a bitter tasting drug may be successfully used in the formulation of Lech without loss of therapeutic effectiveness.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lech et al. (USPN 5,681,577) in view of Kutilek, III et al. (USPN 5,770,217) and further in view of the Handbook for Pharmaceutical Excipients ("Handbook").

Lech teaches the elements discussed above, however Lech is silent to the weight percentage range of D-mannitol being 20-99% of the tablet.

The Handbook teaches that mannitol is typically used in amounts of 10-90% in conventional tabletting (item 17 at page 180). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include mannitol in the amounts suggested by the Handbook with a reasonable expectation of success because the prior art suggests that mannitol is routinely and traditionally used in tablets in the amount of 10-90%.

Claims 19 and 77-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lech et al. (USPN 5,681,577) in view of Kutilek, III et al. (USPN 5,770,217) and further in view of Remington: The Science and Practice of Pharmacy (referred to hereinafter as "Remington").

Lech and Kutilek teach the elements discussed above including disintegrants such as microcrystalline cellulose and other cellulose derivatives. Lech and Kutilek are silent to the particular disintegrants, crospovidone, low-substituted hydroxypropyl cellulose and croscarmellose sodium.

Remington teaches well known disintegrants used in the preparation of tablets including crospovidone and celluloses such as croscarmellose and carboxymethylcellulose (page 1619). Both references teach tablets and conventional tabletting methods containing conventional tablet ingredients. It would have been obvious to one skilled in the art at the time the invention was made to substitute one disintegrant for another because they are art-recognized equivalents and said substitution would achieve the predictable result of producing a tablet.

Conclusion

All claims have been rejected; no claims are allowed.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Casey Hagopian whose telephone number is 571-272-6097. The examiner can normally be reached on Monday through Friday from 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carlos Azpuru, can be reached at 571-272-0588. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Casey S Hagopian/

Examiner, Art Unit 1615

/Carlos A. Azpuru/

Primary Examiner, Art Unit 1615